Serial No.: 10/550,863

Filed: September 26, 2005

Page : 2 of 14

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

<u>Listing of Claims</u>:

1. (Currently Amended) An electrical component having multiple layers, the electrical component comprising:

dielectric layers that are stacked to form a main body;

electrodes positioned at intervals between at least some of the dielectric layers;

at least two bumps configured to act as electrical contacts for the electrical component, the bumps being on a surface of the main body; and

contacts in the main body that electrically connect bumps and electrodes;

wherein the electrodes comprise first and second electrode stacks, each of the first and second electrode stacks contacting one of the bumps;

wherein the electrodes in at least the first electrode stack are electrically connected to first contacts and second contacts, the first contacts being offset from the second contacts; and

wherein within the first electrode stack at least one of the bumps is connected to at least one of the electrodes by the first contacts, and at least a pair of two consecutive electrodes are connected by the second contacts.

US N

Serial No.: 10/550,863

Filed

: September 26, 2005

Page

: 3 of 14

2. (Previously Presented) The electrical component of claim 1, wherein a first contact electrically connects electrodes in the first electrode stack to a bump, and a second contact electrically connects electrodes in the second electrode stack to a bump.

3. (Previously Presented) The electrical component of claim 1, wherein the first and second electrode stacks face each other in the main body; and

wherein the main body comprises a region between the first and second electrode stacks that does not contain an electrode.

- 4. (Previously Presented) The electrical component of claim 1, wherein electrodes from the first and second electrode stacks overlap.
- 5. (Previously Presented) The electrical component of claim 1, further comprising: floating electrodes in the main body, wherein the floating electrodes do not contact the bumps.
- 6. (Previously Presented) The electrical component of claim 5, wherein the floating electrodes overlap electrodes from at least one of the first and second electrode stacks.
 - 7. (Previously Presented) The electrical component of claim 1, further comprising: a third bump on a surface of the main body; and

Serial No.: 10/550,863

Filed: September 26, 2005

Page : 4 of 14

a third electrode stack in the main body, the third electrode stack comprising at least one

electrode the third electrode stack being electrically connected to the third bump via a contact;

wherein the at least one electrode in the third electrode stack overlaps an electrode in at

least one of the first and second electrode stacks.

8. (Previously Presented) The electrical component of claim 7, wherein electrodes in the

first and second electrode stacks do not overlap.

9. (Previously Presented) The electrical component of claim 7, wherein the first, second,

and third electrode stacks each comprise one electrode.

10. (Previously Presented) The electrical component of claim 7, wherein overlap areas

between electrodes from different electrode stacks have different sizes.

11. (Previously Presented) The electrical component of claim 7, wherein electrode

overlap areas between the third electrode stack and the first electrode stacks have different sizes

than electrode overlap areas between the third electrode stack and the second electrode stack.

12. (Previously Presented) The electrical component of claim 7, further comprising:

a fourth bump on a surface of the main body;

a fifth bump on a surface of the main body;

Serial No.: 10/550,863

Filed: September 26, 2005

Page : 5 of 14

a fourth electrode stack comprising electrodes in the main body;

a fifth electrode stack comprising electrodes in the main body; and

contacts that contact the fourth electrode stack to the fourth bump and that contact the fifth electrode stack to the fifth bump;

wherein electrodes in the fourth electrode stack overlap electrodes in the second electrode stack and electrodes in the fifth electrode stack.

13. (Previously Presented) The electrical component of claim 1, further comprising:

additional bumps on the surface of the main body; and

additional electrode stacks in the main body, each of the additional electrode stacks being

connected to a corresponding additional bump.

14. (Previously Presented) The electrical component of claim 13, wherein at least some

electrodes from different electrode stacks are electrically connected to one another.

15. (Previously Presented) The electrical component of claim 12, wherein all bumps are

on a same main surface of the main body.

16. (Previously Presented) The electrical component of claim 1, wherein the dielectric

layers comprise a ceramic material.

US N

Serial No.: 10/550,863

Filed: September 26, 2005

Page : 6 of 14

17. (Previously Presented) The electrical component of claim 16, wherein the ceramic

material comprises a varistor ceramic based on one of ZnO-Bi and ZnO-Pr.

18. (Currently Amended) The electrical component of claim 16, wherein the ceramic

material comprises a capacitor ceramic comprising is one of [[NPO]] NPO ceramics and doped

BaTiO₃.

19. (Previously Presented) The electrical component of claim 16, wherein the ceramic

material comprises at least one of nickel, manganese, spinel, and perowskite.

20. (Previously Presented) The electrical component of claim 1, wherein the dielectric

layers comprise glass.

21. (Previously Presented) The electrical component of claim 1, further comprising:

at least three additional bumps on the surface of the main body; and

at least three additional electrode stacks in the main body, each of the electrode stacks

being electrically connected to a corresponding bump;

wherein the main body has an area of less than 2.5 mm².

22. (Previously Presented) The electrical component of claim 1, further comprising:

at least seven additional bumps on the surface of the main body; and

Serial No.: 10/550,863

Filed: September 26, 2005

Page : 7 of 14

at least seven additional electrode stacks in the main body, each of the electrode stacks

being electrically connected to a corresponding bump;

wherein the main body has an area of less than 5.12 mm².

23. (Previously Presented) The electrical component of claim 1, further comprising:

at least nine additional bumps on the surface of the main body; and

at least nine additional electrode stacks in the main body, each electrode stack being

electrically connected to a corresponding bump;

wherein the main body has an area of less than 8 mm².

24. (Previously Presented) The electrical component of claim 1, wherein the through

contacts comprise channels in the main body that contain an electrically conductive material.

25. (Previously Presented) The electrical component of claim 24, wherein the channels

have one of a round and a rectangular cross-section.

26. (Previously Presented) The electrical component of claim 1, further comprising:

additional contacts in the main body that electrically interconnect electrodes in a single

electrode stack the additional contacts being in different dielectric layers and being offset from

one another, the electrical component comprising first additional contacts for the first electrode

stack and second additional contacts for the second electrode stack.

Serial No.: 10/550,863

Filed: September 26, 2005

Page : 8 of 14

27. (Previously Presented) The electrical component of claim 26, wherein the main body has two opposite main surfaces and two front faces, the bumps being on the main surfaces; and

wherein contacts closer to the bumps are at a greater distance from neighboring front faces of the electrical component than contacts farther away from the bumps.

- 28. (Previously Presented) The electrical component of claim 24, wherein the electrically conductive material comprises at least one of Ag, AgPd, AgPt, AgPdPt, Pd, Pt, and Cu.
 - 29. (Previously Presented) An arrangement comprising:

the electrical component of claim 1; and

a carrier substrate comprising contact pads for connecting to the electrical component, the contact pads being on a surface of the carrier substrate;

wherein the electrical component is mounted on the carrier substrate in a flip chip arrangement with clearance relative to the carrier substrate; and

wherein the electrical component is electrically connected to the contact pads via the bumps.

Serial No.: 10/550,863

Filed: September 26, 2005

Page : 9 of 14

30. (Withdrawn) A method for manufacturing an electrical component comprised of

multiple layers, the method comprising:

forming a main body comprising dielectric layers, electrodes, and contacts in an interior

of the main body, the electrodes being between at least some of the dielectric layers, the

dielectric layers having through holes that contain an electrically conductive material that forms

the contacts, and

forming bumps directly on the contacts.

31. (Withdrawn) The method of claim 30, wherein the main body has two main surfaces

and at least two front faces, the contacts comprising channels in the interior of the main body that

run transversely to the main surfaces; and

wherein the bumps are formed on the main surfaces.

32. (Withdrawn) The method of claim 30, wherein the contacts are formed in different

dielectric layers such that contacts in neighboring dielectric layers are offset relative to each

other.

33. (Withdrawn) The method of claim 30, wherein contacts that are closer to the bumps

are at a greater distance from neighboring front faces than contacts that are farther from the

bumps.